A STUDY ON SCHOOL HEALTH PROGRAMME IN GOVERNMENT PRIMARY SCHOOLS OF BANGALORE A SOCIAL WORK PERSPECTIVE

Final Synopsis

of the PhD Thesis to be submitted to Mangalore University for the award of degree of Doctor of Philosophy in

Social Work

Submitted by

Sushma G Murthy

Under the guidance of

Dr. Rameela Shekhar

Research Guide

School of Social Work (Autonomous)

Roshni Nilaya

December 2019

CONTENTS

CHAPTER NUMBER	CHAPTER	PAGE NUMBER
I	INTRODUCTION	1-3
II	REVIEW OF LITERATURE	4-6
III	METHODOLOGY	7-25
IV	RESULTS	26-36
V	DISCUSSION	37
VI	CONCLUSION AND RECOMMENDATION	38-39
	REFERENCES	40-42

INTRODUCTION

School and health

It is the responsibility of every nation to safeguard the health of its children. This is vital in ensuring the productivity of its future generations. It has been found that one's quality of life in the initial years of life determines the quality of health and development later on and hence infants and young children must be provided with an environment that meets their needs (Sen Gupta, De Wit, & Mc Keown, 2007). It is the magnitude of various physical and mental health issues in Indian children of school-going age, which created the call for attention and a quick resolution.

The current study focuses on school health programmes in the government elementary schools of Bangalore, Karnataka, as schooling is considered an important aspect in determining the overall development of an individual. A child's secondary socialization begins in school and it shapes the social wellbeing of the child. Schooling has direct effects on children's educational achievement, literacy, as well as mathematical and scientific expertise. The development of social skills and feelings are also supported by the school environment, which may be helpful in gauging later academic performance (Sylva, 1994).

A school is also a place for watching changes in a student's knowledge, attitudes, and behaviour in a continuous manner. This makes it integral to involve schools in child health promotion, more than other mediums. Historically, schools have been considered as ideal settings for health promotion (Pan Canadian Joint Consortium for School Health, 2010).

Importance of school health programs

Since more children attend schools today than ever before, schools can be considered an effective medium of promoting child health not only by reaching children but also by engaging their families in an organized way (WHO, 1999). Comprehensive School Health (CSH) is accepted and implemented internationally as the most successful way of safeguarding the health of children and the school community. CSH is a structure for promoting pupils' academic performance while safeguarding their wellbeing through a deliberate and holistic method (Pan Canadian Joint Consortium for School Health, 2010).

For school-based mental health programmes to be successful, they should be planned and implemented carefully. Though these programmes differ from school to school, some similarity exists. It is important to keep all the stakeholders—parents, children, teachers, and health professionals—engaged in the entire process (Richardson, Morrissette, & Zucker, 2012).

School health program in Karnataka

The present study looks at the school health programme carried out by the state of Karnataka in government run elementary schools in the city of Bangalore.

I. Rashtriya Bala Swasthya Karyakram

The present school health programme has been included under Rashtriya Bala Swasthya Karyakram (RBSK). This program commenced in the year of 2013-14 (Directorate of Health and Family Welfare, Government of Karnataka, 2017). Under this programme, children from 0 to 18 years are screened for 30 health conditions broadly classified under four Ds, namely, "Defects at birth", "Developmental delays", "Diseases", and "Deficiencies".

II. Rashtriya Kishor Swasthya Karyakram (RKSK)

In order to ensure holistic development of the adolescent population, the Ministry of Health and Family Welfare launched Rashtriya Kishor Swasthya Karyakram (RKSK) on 7th January 2014, to reach out to 253 million adolescents. (Directorate of Health and Family Welfare, Government of Karnataka, 2017).

III. "Shuchi" Yojane

This is a scheme present in all the government schools. It consists of services related to menstrual hygiene. It aims at providing education and awareness on menstrual hygiene as well as the distribution of sanitary napkins in schools to adolescent girls. During 2016-17, a total of 33,63,889 girls benefitted from this distribution of sanitary napkins (Directorate of Health and Family Welfare, Government of Karnataka 2017).

Need for a school social worker in school health programme

The study is also done with a social work perspective since school social work is an important field of professional social work. While many private schools have a school social worker/counsellor, the government schools in Karnataka are yet to receive a mandate on the same. Many of the physical and mental health problems in children go unnoticed and undetected. This continues to manifest in the form of truancy, lack of concentration, and several mental health problems among children.

Rationale for the study

In this study, the various stakeholders of the programme, such as school headmasters, children, parents, and the members of health screening teams, will be included. Their perspectives on strengths, limitations, and strategies to be incorporated to enhance the comprehensiveness of the existing programme will be invaluable. The study aims at covering only the government elementary schools since private schools get students from a privileged background who have access to more health resources. The government primary schooling cost is far less compared to private managed primary schools in India; schooling cost in the latter can be hundred times higher than the former. (Muralidharan & Kremer, 2006; Gouda, Das, Goli, & Pou, 2013).

Conclusion

While it is praiseworthy that the state of Karnataka offers various programmes to safeguard and promote the wellbeing of children, the current study is an attempt to understand the strengths and gaps in the health programme in order to make strong recommendations to bridge these gaps if any. This will improve the system and benefit the children.

REVIEW OF LITERATURE

The subject of school health is not a new concept and has been used in India and abroad for decades as suggested by the review of literature. In India, the school health programme was also a part of several five-year plans and health review committees. The administration, components of the programme and child-related disorders were extensively discussed and decisions were taken accordingly. This review of literature includes studies conducted in India and abroad on child health issues; importance of school in children's mental and physical development; health-related quality of life of children; school health services, and their various components; as well as the role and relevance of school social workers in enhancing school health services.

Influence of school on child development

It is important to understand that a child spends a significant portion of the developmental stage in school. Schools can be viewed as a protective factor which ensures security, positive drive, socialisation, and sustains constructive student outcomes (Osher, Kendziora, Spier, & Garibaldi, 2014). Schooling is a phase where children go through their formative years and part of the onus is on schools to ensure that the challenges and expectations of these formative years are fruitfully met (Blažević, 2016).

School health programme

School health programmes are ubiquitous in all the high-income countries and in most middle-income countries. In low-income countries, these programs were a familiar attribute of early, predominantly regal education systems (Bundy et al., 2006). They were primarily characterized by clinical diagnosis and treatment in elite schools in cities. Today, there is a transition in the condition where newer policies and organisations are being made to ensure that programmes are centred on promoting health, and enhancing the academic performance of children. School health programmes also aim at improving the social development of underprivileged children (Bundy et al., 2006). Thus it is also important to maintain equity among all the school environments (Huang, Cheng, & Theise, 2013). Disparities in school environments are often ignored during decision-making and due to this there exists a lack of equity in school environments. Many health issues and disparities prevail among schools of minorities and low-income group

children (Huang, Cheng, & Theise, 2013).

School health services in India

The School Health Committee chaired by Ms. Renuka Ray, provided comprehensive recommendations in 1961, by after reviewing the existing programme in Indian Schools (Government of India, 1961). Any school health programme will fail unless it ensures appropriate treatment for children. The committee reported that significant drawback found in school health services in numerous states in India, is the absence of a satisfactory system for implementing remedial measures and follow-up. The lack of cooperation between parents and school officials also resulted in unsatisfactory outcomes of the programme Though hygiene and health education topics are included in the school curriculum in some states, the practical aspect is not emphasised upon (Government of India, 1961).

School social work

School social workers are an integral part of the educational team, working with teachers, psychologists, counsellors, educational administrators, speech and language pathologists, nurses, and other staff. Their unique professional training in social work empowers them to understand and interpret the influences of the school, home, and community on children. School social workers identify factors that can make schooling a more successful experience for students (Illinois Association of School Social Workers, 2018).

Gaps in literature

The current review extensively discusses the role of school-based health clinics in safeguarding the health of children. These clinics not only aid in health promotion, but also promote the academic progress of children. Since the concept of school-based health clinics is yet to be introduced in Government Schools in Karnataka, it is crucial to study the perspectives of various stakeholders in this regard. While many studies indicate that schools have an important role to play in maintaining the physical and mental wellbeing of children, in India, no study has been conducted to monitor the school health programmes per se.

The gap in research on Indian school health programmes gains emphasis in comparison to the numerous and comprehensive studies conducted outside India on various issues related to school social work and school health programmes. Looking at the number of

Indian studies conducted on the mid-day meal scheme, it is clear that a great amount of attention is diverted towards its progress. Though it is a significant programme targeted at improving child health, the enquiry into, and solutions for child health problems that stem from reasons outside nutritional deprivation remain minimal in comparison.

Need for the current study

The review includes discussion about the needed collaboration among various government departments and schools to establish an effective health programme for children. To advance to this stage of collaboration, there must be research-based evidence on the efficacy of the existing school health programme. The existing school programme is provided under Rashtriya Bala Swasthya Karyakram (RBSK) with additional adolescent programmes like Rashtriya Kishor Swasthya Karyakram (RKSK) and 'Shuchi' Scheme. In India, the health needs of school-going children are different from children in other countries, and multi-perspective research will benefit the comprehensiveness in recognising problems and their causes. The perspectives of various stakeholders like teachers, parents, children and health team members need to be gathered and analysed to ensure the emergence of satisfactory strategies.

METHODOLOGY

This section deals with research methodology adopted for the study. The chapter includes discussion on the aim, objectives, sample and research design respectively.

Aim

The aim of the study is to examine the existing school health programme in government primary schools of Bangalore from a social work perspective.

Objectives

Quantitative Method

I. To explore the available health related basic facilities and services in government primary schools of Bangalore.

II. To explore the commonly reported physical and mental health issues in school children of government primary schools of Bangalore.

III. To know the opinion of the mobile health team members of Rashtriya Bala Swasthya Karyakram with regard to the implementation and comprehensiveness of the program and on the need for a school social worker.

IV. To study the health related quality of life of government higher primary school children.

Qualitative Method

V. To understand the perception of headmasters on school health program in the context of commonly reported physical and mental health issues of children.

a. What is the status of basic health related facilities in schools?
b. Are there any specific physical and mental health needs in children, as observed/reported in classrooms/campus by the Teachers/headmasters, that need to be given due importance?
c. How are the various components of the health program helping in improving the overall development of children?
d. What are some of the limitations of the health services being offered to school children?
e. What are the suggestions to improve the health services?
f. Is there a need for a school social worker/counsellor?

VI. To know the perception of parents on the health services provided in schools through Focus Group Discussions. (FGD)

a. What are the commonly experienced health issues among children?
b. What are some of the health services provided for children in school?
c. How are these school health services benefitting the children?
d. What are some of the limitations of the services and suggestions to overcome them?
e. Is there a need for a school social worker/counsellor?

Mixed Method

VII. To triangulate the perspectives of headmasters, parents and health team members on health issues of school children and school health services with the overall health related quality of life of children in the Discussion chapter.

VIII. To triangulate the perspectives of headmasters, parents and mobile health team members on the need and scope of school social worker in the spectrum of school health services in the Discussion chapter.

Operational definitions

- **Government Higher Primary Schools**

  All schools run by the Department of Education, Government of Karnataka, which include both higher and lower primary classes from class 1 to class7/8, in Bangalore city.

  - **Headmaster**

    One teacher with highest responsibility in every government higher primary school in Bangalore city.

- **School Health Program**

  It is a combination of various health services namely Rashtreeya Bala Swasthya Karyakram (RBSK), Rashtreeya Kishori Swasthya karyakram (RKSK) and Shuchi scheme offered by the government to safeguard the health of all the children of government higher primary schools of Bangalore city.

- **Mobile health team members**

  All the medical officers of mobile health teams of Rashtriya Bala Swasthya Karyahram.

Conceptual framework

Erik Erikson was a psychologist who developed one of the most popular and influential theories of development. While his theory was influenced by psychoanalyst Sigmund Freud's work, Erikson's theory focused on psychosocial development rather than psycho sexual development. The current study is an attempt to highlight the importance of childhood as an important developmental stage where, as discussed in the theory, may lead to several health problems which may lead to more serious forms of "developmental issues". This can be understood better with the knowledge of different stages given by Erikson (1993, originally published in 1950).

Initiative Vs. Guilt, is a stage where, he states that children who are successful at this stage feel capable and able to lead others and those who fail to acquire these skills are left with a sense of guilt, self-doubt, and lack of initiative. Similarly, when an ideal balance of individual initiative and a willingness to work with others is achieved, the ego quality known as purpose emerges. The theory also discusses the stage of Industry vs. Inferiority which starts from the age of 5 and lasts till 11 years. This stage is undoubtedly an important phase in a child's life where major part of the child's life is spent in the school. When a child suffers from ill health repeatedly it will invariably affect the child's attendance, class participation and finally the overall performance at academics. As these are the formative years in a child's life, poor health resulting in poor academic performances more often leads to poor self-concept which will further hamper the development of a healthy personality later in life.

The problem of continued or repeated ill health may also go beyond mere academic performance to affect the abilities of a child at various other extracurricular activities like sports or arts. This will bring down the morale of a child, at times leaving an indelible mark on the child's self-image. It is known that through social interactions, children begin to develop a sense of pride in their accomplishments and abilities. Children who are encouraged and commended by parents and teachers develop a feeling of competence and belief in their skills. Those who receive little or no encouragement from parents, teachers, or peers will doubt their abilities to be successful. (Erikson 1993, originally published in 1950). When children do not receive the required positive strokes by their significant others for the work they do, then children develop a sense of doubt about their abilities. In case of children plagued by ill health, as discussed earlier, may fail to receive such encouragement by their significance others due to their poor performances.

Research shows that majority of the poor in Karnataka studying in the primary and middle school levels depend on government-run schools for their education (Mahal, 2005). Several social issues like poverty and ignorance play an important role in making this stage of development of these school goers a difficult one. In case of discouragement or use of harsh punishment at the school, the child will only develop an inferiority complex and may hardly attempt to do anything challenging. A child may be very good at drawing or painting if not at scoring high marks in academics. It is necessary that the child's inherent potential is recognised and nurtured instead of punishing or ridiculing the child for failing in a particular task. This can be done efficiently with the help of a mental health professional who has the knowledge of developmental stages.

Identity vs. Confusion is the next stage of development (Erikson 1993, originally published in 1950) where during adolescence children explore their independence and develop a sense of self. Those who receive proper encouragement and reinforcement through personal exploration will emerge from this stage with a strong sense of self and a feeling of independence and control. Those who remain unsure of their beliefs and desires will feel insecure and confused about themselves and the future. This phase is also important from the point of this study as it includes children of higher primary schools who may fall under the category of adolescence which is 10 years to 19 years as per World Health Organization (2007).

In the light of the above theory, it is important to assess if adequate attempts are being made to safeguard the holistic development of children during their school going stage. Even when a child shows symptoms of somatisation in the form of fever, stomach pain which can purely be because of lack of encouragement at school or parents, fear of punishment, pressure to perform certain tasks or peer pressure there should be an adequate mechanism to address these issues. These psychological issues seem to be "intangible" for a direct medical intervention and rather they call for an intervention by a professional social worker/counselor who has the knowledge of developmental theories and child psychology. A strong and comprehensive school health program that comprises of both physical and mental health services will go a long way in promoting the holistic health of the young. Thus the present study attempts to explore the efficacy of the present health program and suggest ways to enhance the comprehensiveness of the same by keeping in consideration, both physical and mental health of school going children.

Research design

This is a mixed method study with the combination of qualitative and quantitative research methods. The most common and well known approach to mixing methods is the Triangulation Design (Creswell, 2003). The purpose of this design is "to obtain different but complementary data on the same topic to best understand the research problem" (Morse, 1991). Mixed methods research originated in the social sciences and has recently expanded into the health and medical sciences including fields such as nursing, family medicine, social work, mental health, pharmacy, allied health, and others. In the last decade, its procedures have been developed and refined to suit a wide variety of research questions (Creswell and Clark, 2011). The design tries to answer the research question with the help of both the methods.

In the current study, Multilevel Simultaneous Triangulation Design is used to gather data from various levels of participants like headmasters, parents, students and health teams. A multilevel model involves the use of two or more sets of samples extracted from different levels of the study (Different population). For example, one level of sample may involve students in a school, (quantitative phase) and the other level may involve teachers, parents, principal etc. (qualitative phase). (Onwuegbuzie & Collins, 2007). The findings are then triangulated or merged by combining the results of each level at the time of analysis and discussion for overall interpretation. In this study, child health and school health program are occurrences which need to be understood through experiences of people concerned directly and observations of those concerned indirectly. Quantitative method was used to achieve the objective of assessing health related facilities in schools, to collect mobile health team members' perspectives and to assess health related quality of life of school children while qualitative method was followed in achieving the objective of collecting headmasters' and parents' opinion on the program. The results of both the method from different levels were triangulation during discussion. While health related infrastructure like safe drinking water, toilets, playground can be assessed quantitatively, certain observations and experiences also need to be used for analysis in order to get a holistic perspective about school health. The information collected in terms of quantitative data was confined to number and condition of toilets, availability of water facility, playground, components of health services, midday meal and so on. It is only when in-depth interviews were conducted qualitative information was obtained which helped in understanding the underlying complex problems

associated with children's health, structure of the programs, administration, implementation, laws related to employment of staff of different cadres, problems faced and suggestions to resolve the same. Since the study is about children who are below the age of 13, it becomes extremely important to collect data from the head of the schools as they get to experience and observe changes in children's physical health, behaviour resulting from incidents that affect children directly or indirectly. Thus in-depth interviews were conducted with the headmasters of the schools as this method gives more scope for flexibility and lack of structure (Bryman 2001), resulting in information generation at length and breadth.

Focus Group Discussions (FGD) were held with parents of school going children who are availing the services government school health program. Parents are also another unit of sample here since it was important to know the perspectives of parents on the health facility and services available for their children in their schools. Krueger and Casey (2000) defined FGD as "a carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment". Most researchers consider FGD as a qualitative method of data collection as it involves a combination of interviewing and observation both of which are qualitative techniques and the questions are typically open ended resulting in narrative data. (Tashakkori &Teddlie 1998).

Quantitative method of data collection was used to assess the Health Related Quality of Life (HRQoL) of children of 11 to 13 years of age studying in 7^{th} standard. Kid-KINDL^{R} was administered to measure their HRQoL. Health-related quality of life is generally understood as a multidimensional concept, consisting of various components of well-being and functionality from the subjective perspective of the individual. Health-related quality of life describes the self-perceived health state or the 'experienced health'. The components of the quality of life assessments include the dimensions through which the individuals perceive and judge their health situation. This test was included in this study to assess the HRQoL of school children in the light of school health services being provided. A questionnaire with both close and open ended questions was administered on mobile health team members of RBSK. Both qualitative and quantitative types of items were included and analysed separately. A questionnaire items may be both close ended and open ended or both. (Tashakkori & Teddlie 1998). The combination of the two types of questions results in augmenting the clarity gained as each strategy complement the

other. The doctors from the mobile health teams were given the questionnaire which could be answered at their own convenience as they are always on the move covering a number of schools every day.

Population

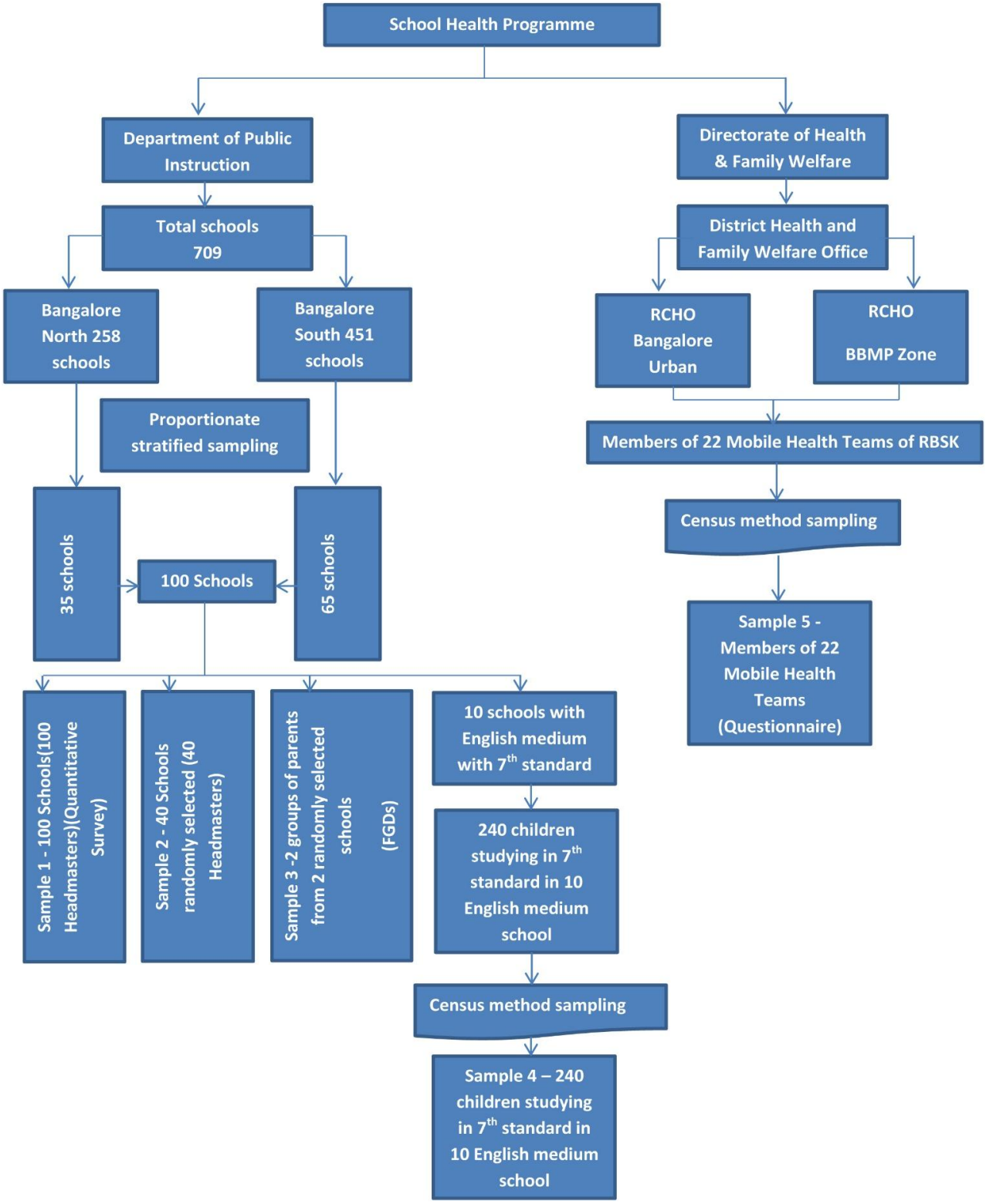
1. The population comprises of headmasters of district wise distribution of higher primary schools and lower primary schools in Bangalore North and South. Population of the study is headmasters of 709 higher primary schools run by the Department of Education which are divided into Bangalore North (258 schools) and Bangalore South (451 schools). (District wise / Management wise Elementary Schools (Higher Primary Schools) in the State 2016/2017).
2. Parents of children studying in 709 higher primary schools run by the Department of Education comprise the population for Focus Group Discussion.
3. All children in the age group of 11 to 13 years studying in 7^{th} Standard in English medium in government higher primary schools of Bangalore are the population for analysis of health related quality of life.
4. All the medical officers of mobile health teams of RBSK comprise another unit of population. There are about 22 teams from both Bangalore Urban and BBMP (Bruhat Bengaluru Mahanagara Palike (BBMP), is the administrative body accountable for civic facilities and some infrastructural properties of the Greater Bangalore metropolitan area.) zones. Each team consists of 2 AYUSH medical officers.

Sampling scheme.

An expert survey was conducted on the feasibility aspect of the study. Discussions with various stakeholders like the officials from the Department of education, Department of Health and Family welfare, Government of Karnataka, Block Resource Persons and teachers from different schools were held with regard to the need and scope of the study as part of pilot study. Samples were drawn from different units of study namely headmasters, parents, children and mobile health team members. The flowchart below throws light on the sampling procedure followed in the study.

Sampling unit, sampling size and method of data collection are discussed under each segment of the study consisting of headmasters (quantitative and qualitative sample), parents, children and mobile health team members, under the heading sample 1, sample 2, sample 3, sample 4, and sample 5.

Diagram No. 3.1 Flowchart of the sampling procedure


School Health Programme
Department of Public Instruction
Directorate of Health & Family Welfare
Total schools 709
District Health and Family Welfare Office
Bangalore North 258 schools
Bangalore South 451 schools
RCHO Bangalore Urban
RCHO BBMP Zone
Proportionate stratified sampling
Members of 22 Mobile Health Teams of RBSK
35 schools
100 Schools
65 schools
Census method sampling
Sample 5 - Members of 22 Mobile Health Teams (Questionnaire)
Sample 1 - 100 Schools(100 Headmasters)(Quantitative Survey)
Sample 2 - 40 Schools randomly selected (40 Headmasters)
Sample 3 -2 groups of parents from 2 randomly selected schools (FGDs)
10 schools with English medium with 7th standard
240 children studying in 7th standard in 10 English medium school
Census method sampling
Sample 4 – 240 children studying in 7th standard in 10 English medium school

Sample size and technique

- **Sample 1**

The first sample consisted of headmasters from 100 Schools for a quantitative survey on basic health related facilities and services available to children in schools. Sample size was determined through arbitrary approach as it was an exploratory study. Government higher primary schools run by Department of Education are divided into Bangalore North and Bangalore South as per their geographical location. Out of the total number of 709 schools, Bangalore North has 258 schools and Bangalore South has 451 schools. A total of 100 schools were selected through stratified proportionate sampling procedure out of 709 government higher primary schools of Bangalore North (258 schools) and South (451) as 14% was the sample size determined by the researcher through arbitrary approach. Altogether, 35 schools from North and 65 schools from South Bangalore were selected leading to a total of 100 schools. Since stratification is a method to get greater degree of representativeness for decreasing the probable sample error, proportionate stratified sampling was followed to select the sample. Headmasters of all 100 schools were administered the survey questionnaire.

- **Sample 2**

40 headmasters from the list of 100 schools were randomly selected as the second group of sample for an In-depth Interview (IDIs). In-depth interviews were conducted among 40 headmasters to know in length about various aspects related to health related basic facilities and services available in schools.

- **Sample 3**

Two groups of parents from two schools each, selected from the list of 100 schools comprised the 3rd group of sample. An FGD was conducted with these two groups of parent volunteers separately to know their perspectives on school health program and to collect related suggestions. The feasibility to meet the parents was very low as the parents, when requested through children and teachers, refused to come for the FGD citing reasons of work and loss of wages. The Researcher conducted FGDs in two schools each at the time of school closure in the evening with those parents who came to pick up their children. Discussions were conducted with two groups of parents who consented for their participation after explaining about the study. Each group consisted of 8 members with homogenous attributes in terms of occupation and educational background forming low socio economic background.

- **Sample 4**

  Children studying in 7th Standard in 10 English medium schools, selected from the list of randomly selected 100 schools, comprised the 4th group of sample. Since the Kid-KINDL^R questionnaire was in English, only those children studying in English medium schools were selected for administering KINDL^R self-assessment scale on health related quality of life. Out of the 100 schools selected for quantitative survey, only 10 schools had English medium. As the scale used was meant for children from 7-13 years of age, children studying in 7th Standard were selected for the test as the comprehensibility is better with children from higher age group. The inclusion criteria followed for age group was 11-13 years. Census method was followed as all the children in the age group of 11-13 years studying in 7th standard from all the 10 schools with English medium were selected for the study. A total of 240 children were administered the scale for self-assessment of health related quality of life.

- **Sample 5**

  The Mobile health teams of RBSK program consisted of the 5th and last sample group. They were divided according to two zones, BBMP (Brihat Bengaluru Mahanagara palike) and Bangalore Urban. Totally there were about 22 teams which consisted of 2 members each. A census method was followed in order to capture varying perspectives. However only 25 members could complete the questionnaire as three were away on maternity leave and 4 of them were not available for questionnaire administration due to absence and three were on long leave. The rest of the positions were left vacant. All the members in the teams were administered the questionnaire.

Permission

Permission was sought and obtained from Deputy Director of Public Instruction (DDPI) of Bangalore South and North to visit and conduct interviews of headmasters of government higher primary schools and to collect the data of children by administering a scale. A copy of the proposal was given and the aim of the study was explained.

- The permission letter was issued with certain terms and conditions by the DDPI of Bangalore North. The terms and conditions stated that
  - Interviews need to be conducted when the headmasters are free and classes should not be disturbed.
  - Research work should be conducted without disturbing the daily school activities of children
  - Money should not be levied from students/teachers/headmasters.

- The permission letter obtained from Deputy Director of Public Instruction (DDPI) Bangalore South came with a direction to all the Board Education Officers (BEOs) to send a circular to all the of government higher primary schools about the proposed data collection. However, practically it worked differently as the researcher contacted all the 5 BEOs and obtained their approval through their seal and sign on the letter of permission issued by the DDPI of Bangalore South.
- Permission was sought from the Department of Health and Family Welfare to collect data from the mobile health teams of RBSK. Since the team members were divided into BBMP zone and Bangalore Urban, the permission had to be obtained from concerned Reproductive and Child Health officers (RCHO). The permission was obtained in writing with a reference made to the nodal officers and Taluk Health Officers (THO). Further the permission letter was produced at each Taluk Health Office which was totally 4 in number under Bangalore Urban. With regard to BBMP zone, the team members were met at the very same office as all of them had a regular meeting on the day of data collection.

Materials and Tools

Various methods were used as the study consists of mixed method involving both qualitative and quantitative methods. Since it is an exploratory study quantitative methods could have been inadequate to assess all aspects of the research questions. In-depth interviews and questionnaires consisting of open and close ended questions along with scales were used for different groups of samples.

- Secondary data was collected on existing school health program through official websites and documents and a content analysis was made. The official websites include website of Ministry of Health and Family welfare, Government of Karnataka, Department of Education, Government of Karnataka, Ministry of Health and Family Welfare, and Government of India. Some of the documents on various health programs for school children like Rashtreeya Bal Swasthya Karyakram, Shuchi, Rashtreeya Kishor Swasthya Karyakram were directly collected from the Health Department.
- Population details with regard to number of schools, area wise distribution of schools and total number of students, gender were obtained directly on paper and through e-mail from offices of DDPI Bangalore South and North, Department of Education.
- A self-made Survey instrument was administered to the headmasters of 100 schools to assess the availability of health related basic facilities and services. It was made in English and translated to Kannada and back translated to English by bi lingual experts. Validation was done by all the subject experts. The information collected as part of the survey included the number and condition of toilets, availability of water facility, playground, components of health services, midday meal and so on.
- A self-made questionnaire to understand the perspectives of mobile health team members on the present status of child health, school health services and needed changes in this regard. The researcher was allowed to attend their general meetings with the RCHO prior to the data collection phase which significantly helped in structuring the questionnaire. The questionnaire consisted of multiple options and open ended questions. It was validated by health officials, faculty members of social work, psychiatric social work, and psychiatry and education officers.
- The Kid-KINDL^{R} was used to assess the health related quality of life of children going to government higher primary schools of Bangalore. KINDL^{R} is a generic instrument for assessing health-related quality of life in children and adolescents and Kid-KINDL^{R} is a version meant for children of 7 to 13 years. The original version of the questionnaire, KINDL^{R}, was developed by Prof. Monika Bullinger in 1994. The KINDL^{R} Questionnaire for Children and Adolescents described below was developed and tested with a view to alleviating the discrepancy between the need of the subject 'Quality of Life in Children and Adolescents' and the lack of appropriate measures (Ravens-Sieberer& Bullinger,2000). In developing it, the goal was to

design a short, methodologically suitable and flexible set of instruments which could be completed both by children which was available for different age groups and stages of development, which could be used for healthy and sick children. This was also tested in Singapore with multi ethnic Asian population of school going children and it exhibited good psychometric properties. This instrument can be used for multi ethnic Asian population. (Wee, Lee, Ravens-Sieberer, Erhart, & Li, 2005).

KINDL^R as a generic questionnaire, the KINDL^R can be used to assess health-related quality of life in healthy as well as in ill children and adolescents. (Ravens-Sieberer&Bullinger2000). The instrument has been adapted among diverse populations in Western and Asian countries. Cronbach's a for the KINDL^R ranged between 0.90 and 0.95 and showed adequate construct and convergent validity (Paltzer, Barker, & Witt, 2013). Health-Related Quality of Life (HRQoL) is generally understood as a multidimensional concept, which consists of various components of well-being and functionality from the subjective perspective of the individual. In this way, health-related quality of life describes the self-perceived health state or the 'experienced health'. The components of the quality of life assessments include the dimensions through which the individuals perceive and judge their health situation. In general, the physical, mental, emotional and social dimensions are assumed to be the main components. These main components can be further subdivided into the specific dimensions. For children and adolescents, relevant dimensions are, for example, self-perception/ self-worth, perceived quality of the relationship to one's parents or friends, as well as school-related well-being. (Raven-Sieberer, Erhart, Wille, Bullinger, & group, 2008).

Similarly, the Kid-KINDL^R questionnaire comprises 24 items to which the respondents are asked to respond on a 5- point Likert scale (never, seldom, sometimes, often, all the time). The resulting subscales are physical wellbeing, emotional well-being, self-esteem, family, friends, and everyday functioning (school or nursery school/kindergarten). The subscales of these six dimensions can be combined to produce a total score. Sum scale scores can be calculated by summing up the answer scores (1–5) of each scale. It is also possible to transform all scales so that values range from 0 to 100, with higher values representing better quality of life. Psychometric properties have, thus far, been tested in a sample of school children and of chronically ill children in rehabilitation. Psychometric results revealed a high

degree of reliability (Cronbach's a ‡ 0.70 for most of the subscales and samples) and a satisfactory convergent validity of the procedure. (Raven-Ravens-Sieberer, Erhart, Wille, Bullinger, & group, 2008). The representative norm data for the KINDL^{R} scales range from 58.3–81.9 points for the self-reported data of children and adolescents, based on a scale from 0 to 100 points (Ravens-Sieberer, Erhart, Wille, Bullinger, & group, 2008).

- In-depth Interviews were used to study the opinion of head Masters and health teams about the nature of the program and various health needs of children. A guide for the interview was made and it was validated by health officials, professors of social work and psychiatric social work, psychiatrists and education officers. Interviews guide was prepared on problems associated with health facilities, underlying complex issues influencing children's health, structure of the programs, administration, implementation, laws related to employment of staff of different cadres, problems faced and suggestions to resolve the same. The need for a school social worker was also explored in the interview.
- Discussion guidelines on common child health problems, ways of dealing with sickness of children, school health services and needed improvements, was prepared for the FGD. It was validated by health officials, faculty members of social work, psychiatric social work, and psychiatry and education officers**.**

Pilot Test

The self made questionnaires were administered to 10 headmasters and 5 mobile health team members to understand the compatability, culture sensitivity and to know the possible discrepencies. The questions were reframed and changed based on the results of the pre test. A self assessment test with Strength and Difficulty questionnaire (SDQ) was carried out with 90 children studying in 7th Standard in government primary schools of Bangalore as part of the pilot study. The survey revealed that mental health difficulties were being faced by significant number of children. It helped in understanding the strengths and difficulties of children based on which further test on Health Related Quality of Life (HRQoL) with KINDL^{R} could be decided. KINDL^{R} was administered to 20 children to ensure the comprehensibility of the questions. The scale was tested to be simple enough for children to comprehend.

Data collection

- **Sample 1**

  Questionnaire was administered to the headmasters of 100 randomly selected schools. The questionnaire was administered to assess the health related basic facilities available in schools and to know the implementation and components of the program on target population with regard to detection of cases, health programs, referral and treatment services and provision of supplements to combat illnesses and maintain health. Informed consent was obtained from all the participants after explaining the aim and objectives of the study.

- **Sample 2**

  An in depth interview was conducted with 40 headmasters after obtaining an informed consent. All the interviews were recorded and notes were taken down as part of observations and special references. Since some participants were not comfortable with audio recording, a detailed written notes of the interview were taken. Interviews were conducted based on the interview guide prepared by the researcher that dealt with health related basic facilities and services available in schools, health facilities, underlying complex issues influencing children's health, structure of the programs, administration, implementation, laws related to employment of staff of different cadres, problems faced and suggestions to resolve the same. The need for a school social worker was also explored in the interview.

- **Sample 3**

FGD was conducted with two groups of parents after having waited near the gate at the time of school closure in the evening. Due to feasibility issues in meeting the parents, the researcher could only meet those parents who came to pick up their children. FGDs were conducted with parents who consented and volunteered for participation in the study after explaining the aim and objective of the study. A written consent was obtained from all the participants. FGD lasted for 35-40 minutes and all the participants actively took part in the discussion. FGDs were conducted based on the Discussion guidelines, prepared by the researcher, which dealt with common child health problems, ways of dealing with sickness of children, present school health services and the needed improvements in the same.

- **Sample 4**

Kid-KINDL^{R} scale was administered for children in the age group of 11 to 13 years

studying in 7th standard to assess their Health Related Quality of Life. (HRQoL). The headmasters of the schools were explained about the scale and the study on producing the permission letter obtained from the DDPI. After this the written informed consent was obtained from all the parents and assent was obtained from all the children selected for self-assessment before administering the scale. The children were briefed about the scale and self-assessment procedure.The scale was administered and the purpose and method of filling the items were explained by the researcher by being present in all the self-assessment process throughout. This was done as per the suggestion made by the authors of the scale that though the items on the scale are in simple language which can be understood easily by children; the researcher can be present in the case of children whose reading skills are perhaps not of a necessary standard. (Ravens-Sieberer&Bullinger 2000).

- **Sample 5**

The mobile health team members were given the informed consent form and the aim and objective of the study were made clear. Confidentiality was assured. The researcher could meet all the team members from BBMP zone in a common place as they had gathered to attend a meeting. Questionnaire distribution was done as prior consent was obtained from the Nodal officer. The questionnaire took about 15-20 minutes for each participant. The group of participants from Bangalore Urban Zone could not be met in a common place and each team was met separately to get the questionnaire filled. Same procedure was followed with this group also.

- ## Analysis

1. The quantitative data of the study was analysed using statistical tests and inferences were drawn. The survey results were analysed with descriptive statistics by summarising the data, and finding the range of scores on the study measure. Frequency and percentile results were taken for the assessment of categorical data that included basic health related facilities in all schools. Scattered diagram was used to find out the correlation between increase in number of toilets and increase in strength of children in schools.
2. In the KINDL^R Test, Spearman's correlation coefficient, (ρ, also signified by r_s) was used to measure the strength and direction of association between subscales namely physical wellbeing, emotional well-being, self-esteem, family, friends, and everyday functioning. The Spearman’s rho was used as the distribution did not follow the

Gaussian curve and was negatively skewed with more participants falling on the right side of the curve.

3. Mann Whitney test was used to find the gender difference in HRQoL, as two independent groups had to be compared.
4. The data collected from the mobile health teams were assessed by calculating the frequencies and percentage using descriptive statistics.
5. Analysis of qualitative data of the study followed the grounded theory approach outlined by Corbin and Strauss (1990). This being an inductive approach, themes emerged out of the data were used to generate broader empirical generalizations. The different stages of data analysis were as follows.

   - **Open coding**

   At this first level of coding, distinct concepts and categories were looked for in the data, to form the basic units of analysis. Thus the data was broken down into first level concepts, or master headings, and second-level categories, or subheadings.

   - **Axial coding**

   In open coding, the primary focus is on the text to define concepts and categories. In axial coding, concepts and categories are used while re-reading the text to confirm that the concepts and categories accurately represent interview responses and to explore how concepts and categories are related.

   - **Selective coding**

   In this stage, different categories are systematically related to other categories and non-confirmatory evidences are also analysed in order to ensure representation of concepts, known as negative case analysis. Thematic saturation is attained as the properties and dimensions of all the categories are filled in.

- **Validation process**

At the final step of the analysis the theoretical model and categories were developed and validated for ensuring the rigor of analysis. Validation process includes credibility, transferability, dependability, and confirmability.

6. Triangulation was the main aspect in analysis and discussion as the study uses simultaneous multi-level triangulation design. The findings of multiple data were converged to achieve data triangulation. The quantitative data on basic facilities, health services and major unmet health issues along with many other variables are triangulated with the results of qualitative data obtained through in-depth interviews. This triangulation is done with some of the purposes of mixed method study namely comparison, integration and completeness. The major physical and mental health problems as observed and known by the headmasters were listed and compared with the results obtained through parents' FGD and children's data. Similarly, the problems, opinion, observations and suggestions given by headmasters, parents and mobile health team members on the health program were corroborated to find similarities and differences. The results of the FGD of parents were compared with that of the results of in-depth interview, survey and mobile health team members to look for contradictions, similarities and emergence of new themes. The children's data on health related quality of life is also compared with the results of FGD, in-depth interviews of headmasters and responses of health team members in order to test the actual health status of children. The areas of health concerns mentioned by the sample groups like, headmasters, parents and health teams were triangulated and discussed. The last objective on the need for a school social worker was achieved by combining the responses of three stakeholders namely, headmasters, parents and health team members. Triangulation of data was achieved in Discussion chapter.

Limitations

Certain limitations of the study should be noted.

1. Considering the study is limited to a group of government schools in Bangalore, results cannot be generalized to the entire state of Karnataka.
2. FGDs had only mothers as the participants due to feasibility issues.
3. IDIs could not be conducted with the mobile health teams as they were constantly on the move.

4. The physical and mental health issues of children are problems perceived by headmasters and parents and not clinically established.

Ethical considerations

1. Ethical clearance was obtained from the Institutional ethical committee after a making a detailed proposal presentation.
2. Written permission was obtained from Department of Public Instruction and Department of Health and family Welfare for collecting the data from government schools and mobile health teams.
3. Written informed consent was obtained from all the participants namely headmasters, parents and mobile health team members.
4. Informed parental consent and children's assent were received before administering the questionnaire on children.
5. Confidentiality of information and limits of confidentiality were explained.
6. Confidentiality of recorded and written data was assured and maintained.
7. The choice of dropping out from the study at any stage was given to all the participants.
8. All the conditions specified by the Department of public instruction were maintained at the time of data collection.
9. Efforts were made to collect data without disrupting classes and schedule of all the participants.

RESULTS

Quantitative Method

Objective 1: To explore the available health related basic facilities and services in government primary schools of Bangalore.

Table No. 1 Drinking water and compound wall

Characteristic	n (%)
Water	
Corporation water	71
Bore well water	20
Paid water	5
No water	4
Filtering	
Yes	69
No	27
NA	4
Compound wall	
Yes	84
No	16

It is a good sign that 71% of the schools receive corporation water for drinking and other purposes. 20 % of the schools depend on bore wells and 5% schools pay for water which is either from the tanker, Bisleri or from coin booths. 69% of the schools filter the drinking water and 27% of the schools do not filter it. 4% of the schools do not have water facility at all. Though 4% is a small number, deprivation of a facility which is as basic as water cannot be accepted as it adversely affects the health of all children studying in those schools.

Objective II. Commonly observed/reported physical and mental health issues in School Children.

Table No.2 Common physical health issues in school children

Sl. No	Health Problems	n
1	Accidents	4
2	Allergy/asthma	10
4	Death due to dengue	1
5	Dengue/ TB/ viral Fever	24
6	Dental	16
7	Skin	6
8	Dog /monkey bite	6
9	Epilepsy, polio	2
10	Eye problem	4
11	Food poisoning	2
12	Heart/renal problem	18
13	HIV infection	1
14	No major problem	6
	Total	100

The major concern expressed by the headmasters was on viral fever, TB and dengue. 24% of the headmasters reported it to be a major problem. Children in 18% of schools have major illnesses related to heart and renal functioning. Other 16% of the schools have issues related to dental caries. The results indicate that the era of communicable illnesses still persists and the incidence of non-communicable illnesses like heart, renal problems, allergy, asthma in children only prove that there have been additional health burdens that need to be tackled.

Table No.3 Common mental health issues in school children

Sl.No	Mental Health Issues	n (%)
1	Addiction	20
2	Conduct problems	28
3	Depression/emotional problem	24
5	Hyperactivity	4
7	Poor attention	9
8	Unidentified psychological problems	5
9	Unruly	6
10	Violent behaviour	4
	Total	100

24% of the headmasters have observed the problems of emotional disturbance and depression while 28% of them expressed concerns over conduct problems. 20% of the headmasters raised a concern over the problem of addiction. It is alarming that children are exposed to addictive substances as early as in their primary school days. The findings also brought out the need for creating awareness among school teachers on child mental health issues since 5% headmasters mentioned that there are children with ‘unidentified psychological problems’.

Objective III. Opinion of the mobile health team members of Rashtriya Bala Swasthya Karyakram with regard to the implementation and comprehensiveness of the program and on the need for a school social worker.

Table No.4 Health benefits of RBSK Program

Sl. No	Health benefits	N	%
	High risk population	2	8
	Early detection n intervention	13	52
	Free treatment and surgeries	6	24
	Healthy survival of Poor children	4	16
	Total	25	100

The perception on health benefits offered through RBSK is collected from the RBSK medical officers. A number of benefits are mentioned to be availed by children. 52% of them mentioned that early detection and intervention of an illness is a major benefit of the programme as children with serious ailments get checked during the screening and are referred to treatment. Speaking in the same line, 24% of them also stated that the major aspect of the benefit in the programme comes in the form of free treatment and surgeries as many children have received this benefit in different schools.16% of them opined that this program is helping in the healthy survival of poor children. 8% of the participants expressed that the program helps children from high risk population with serious ailments like heart, renal or neurological problems. As early detection of major illnesses help in treatment and cure, free treatment also should continue to be available easily for economically poor children.

Objective IV. Health Related Quality of Life of higher primary school children in the context of availing school health services.

Table No.5 Total quality of Life

Range HRQoL	Frequency	Percent
Low <58.3	59	24.6
Normal 58.3-81.9	162	67.5
High >82	19	7.9
Total	240	100

Representative norm data is at 58.3 to 81.9. Scores below 58.3 is considered as low quality of wellbeing and any score between 58.3 to 81.9 is considered as normal (Ravens-Sieberer, Erhart, Wille, Bullinger, & group, 2008). 67.5% belong to the category of normal score for HRQoL while 24.6%, which is a large number, seem to have a problem with their health related quality of life. This needs to be further analysed in future research to know the factors responsible in lowering the health related quality of life.

Table No. 6 Spearman's rho Correlations

	Physical Wellbeing	Emotional Wellbeing	Self Esteem	Family	Friends	School
Physical Wellbeing	1.000	.387**	.010	.277**	.155*	.091
		.001	.873	.001	.016	.158
	240	240	240	240	240	240
Emotional Wellbeing		1.000	.118	.346**	.358**	.036
			.067	.001	.001	.577
			240	240	240	240
Self Esteem			1.000	.233**	.322**	.324**
				.001	.001	.001
				240	240	240
Family				1.000	.361**	.143*
					.001	.026
					240	240
Friends					1.000	.181**
						.005
						240
School						1.000

*** Correlation is significant at the 0.001 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table No.6 explains the results of Spearman's rho correlations test. There is a significant correlation among physical health, Emotional wellbeing, family and friends. As suggested by the findings, correlation is very highly significant at .001 between physical wellbeing and emotional wellbeing, physical wellbeing and family ($p<.001$) and at .016 between physical wellbeing and friends. ($p <0.05$)

Similarly correlation is very highly significant at between emotional wellbeing and family and emotional wellbeing and friends at .001 ($p <.001$). Self-esteem is also very highly significantly correlated with family, friends and school .001 ($p <.001$). There is a very high significant correlation between family and friends at .001($p <.001$) and significant correlation between family and school at 0.026 ($p<0.05$). The remaining variable, friends is highly significantly correlated with school at .005 ($p <0.01$).

Qualitative Method

Objective V. To understand the perception of Headmasters on School health program in the context of commonly reported physical and mental health issues of children.

Table No.7 Themes and sub themes of IDIs

Sl no	Main Themes	Subordinate Themes
1	Health related basic facilities in school	1.1 Safe Drinking Water
		1.2 Toilet and Sanitation
		1.3 Mid-Day Meals
		1.4 Playground & Physical Education
		1.5 Safe and clean premises
2	Health problems in children	2.1 Physical Health
		2.2 Emotional and Mental Health
		2.3 Issues due to family environment
3	Children with special needs	3.1 Services received
		3.2 Problems and suggestions
4	Rashtreeya Bala Swasthya karyakram (RBSK)	4.1 Health benefits to children
		4.2 Limitations
		4.3 Suggestions to improve
5	Shuchi and Rashtriya Kishor Swathya Karyakram (RKSK)	5.1 Services provided
		5.2 Limitations
		5.3 Suggestions
6.	Health awareness program	6.1 Awareness program on general health
7.	Need for a School Social Worker	7.1 To be provided under school health program
		7.2 High expectation
		7.3 Teachers as counselors
8.	Role of teachers in planning and implementation process	8.1 Health program planning and Implementation process
		8.2 Limitations
		8.3 Suggestions

1. Health-related basic facilities in school

1.1 Safe Drinking Water

Schools seem to be facing issues with water, especially drinking water. While some schools have adequate water supply, a few do not. Participants from schools with insufficient water supply spoke of a paradox that hand-washing training is given to children when the school has no water. Some made the following statements:

"There is no provision of water in the school and then we discuss of hand washing. Theoretical training is given to children about hygiene and hand washing, yet there is not a single drop of water in the school to wash their hands!"

2. Health problems in children

2.1 Physical health

Various kinds of physical health issues were mentioned by the participants and they felt that medical intervention is needed based on these. Some of the commonly noticed physical health issues are: viral fever, tuberculosis, dengue, accidents, dog and monkey bites, polio, epilepsy, HIV infection, asthma, heart and renal issues, allergies, skin problems, dental problems and eye problems.

"There is a rise in dengue and other viral fever. Children do not get any assistance during that time. One child died due to dengue last year."

Objective VI. Perception of parents on the health services provided in schools through Focus Group Discussions.

Table No. 8 Major themes and sub themes

Sl .no	Main themes	Sub themes
1	Child health	1.1 Common illnesses
		1.2 Health expenses
		1.3 Hospital preferences
2	Knowledge on school	2.1 Screening and referral
	Health services	2.2 Aids and appliances
		2.3 Food and supplements
		2.4 Napkins and awareness
3	Limitations	3.1 Immediate care
		3.2 Referral and treatment
		3.3 Psychological problems
		3.4 Adolescent issues
4	Suggestions	4.1 Counseling services
		4.2 Doctor/Nurse in school
		4.3 Vehicle for the school

1. Child health

The discussion began with the topic of children's health. While the major theme emerged was child health problems, several subthemes emerged from the discussion. The subthemes were mainly on related factors associated with child health like commonly faced health issues in children, expenses incurred in on treating them, affordability and accessibility of health services and some of the challenges faced in the process of maintaining children's health.

1.1. **Common health issues**

The participants shared their observations and experiences with regard to child health. Some of the common health issues discussed by the participants were cold, cough and viral fever.

A few others stated that weakness and giddiness are very common among children. It is also seen as a common problem health problem among children which gets handled by the teachers often.

" ..They don't have their food properly…stand for too long in the hot sun during prayer. So they face problems like giddiness, vomiting and weakness…"

1.2 Health expenses

The participants suggest that health expenses are going high. If a child falls sick with cold, cough and fever then one visit to the doctor would cost them anywhere between Rs.500 to Rs.1000. Even in government health centers like Primary Health Centers (PHC), and government hospitals, staff and doctors are alleged to have taken money from patients. The participants stated that the doctors don't even consider if they are poor. No treatment is given if the money is not given.

"….earlier some used to take money…but now everybody takes…"

"…everywhere it is done only with money…otherwise we are asked to go back home"

"…wherever we take the child, we will have to spend minimum of Rs.500 to Rs.1000."

DISCUSSION

Triangulation of the perspectives of headmasters, parents and health team members on health issues of school children and school health services with the overall health related quality of life of children.

School health largely depends not only on the health services provided in schools but also on the physical and social environment prevalent in schools. The quantitative survey reveals that basic physical infrastructure seems to be lacking in some schools where, safe water, clean environment and toilets are unavailable. This is further ascertained in the in-depth interviews where the participants stated that all their efforts towards getting the basic facilities is going in vain. The problems related to absence of compound wall and misuse of school premises by the public seeks greater attention. The mobile health teams also mentioned that unclean environment is one of the major causes of infections and ill health in these children. However, parent participants did not have a complaint on the available facilities in school with regard to infrastructure.

Triangulation of the perspectives of headmasters, parents and mobile health team members on the need and scope of school social worker in the spectrum of school health services.

While there is a greater hope and need felt among parents and headmasters, for a School Social worker, a mixed opinion is received from the health team members. A School social worker does not seem to be a very familiar and popular role among the medical team members though most of the headmasters, wished for a School Social worker. Since all the physical and mental health issues are associated with family, friends and school environment, it is all the more needed to have a school social worker to work with the families, peer and school teachers as part of the intervention strategy. The parents also mentioned that counseling services offered by professionals become a reality in all the Schools. Counseling services should be included as part of school health program. However, while the profession is extremely unfamiliar to the medical teams, it is viewed as a distant reality by the headmasters, as they saw it in the context of schools lacking bare necessities.

CONCLUSION AND RECOMMENDATION

The study brings out the importance of health services provided in schools. Adequate attention must be laid on providing basic health facilities and infrastructure to schools. Safe drinking water, well maintained separate toilets for girls and boys, and clean school premises go a long way in promoting children's health by preventing several communicable illnesses. The appropriate authorities need to heed to the grievances of the school staff in terms of misuse of school premises by the public for illegal activities so as to take stringent action against such acts by the public. Otherwise children will continue to bear the adverse effects of such wrong doings by the public. Physical education should be considered important in maintaining health and adequate focus should be placed on recruiting physical education teacher in every school. Providing satisfactory sport facilities in all government schools including well maintained play grounds is the need of the hour to prevent non communicable illnesses that result out of faulty life style.

Implications

The study delineates implications at several levels including policy making, social work education and social work profession.

Policy level

There is a need to upgrade the government schools by providing all the basic facilities in order to enable them to carry out their primary function which is education promotion. Basic facilities like safe drinking water, clean and adequate number of toilets and safe and hygienic environment should be provided in all these schools to ensure health promotion.

Social work education

Though school is considered as an important field of social work, adequate focus needs to be laid on school health in the curriculum of social work. Since, a professional social worker has a wide range of functions and can occupy a significant position in the entire spectrum of school health services, relevant curriculum and training should be incorporated in the course.

Future research

Similar study can be conducted covering the entire state of Karnataka to understand the nature of school health programme across government schools.

The study unfolded several realities on school health programme through the multiple perspectives from various levels of the school health system. Though the researcher began the study to know about the comprehensiveness of the school health programme in the context of health needs of school children, the mixed method design helped in examining the deeper issues associated with the diverse health needs of children, planning and implementation of school health programme and the needed improvements to be made in the same. The social work perspective included in the research underscored the importance of recognizing the role and functions of a school social worker.

REFERENCES

Blažević, I. (2016). Family, Peer and School Influence on Children's Social Development. *World Journal of Education, 6*(2), 42-49.

Bryman, A. (2008). Social research methods (3 ed.). Oxford: Oxford University Press

Bundy D, Shaeffer S, Jukes M, et al. (2006). School-based Health and Nutrition Programs. Jamison DT, Breman JG, Measham AR, et al., editors. Disease Control Priorities in Developing Countries. Chapter 58, (2 ed., pp. 1091-1108). Washington (DC): The International Bank for Reconstruction and Development / The World Bank; Co-published by Oxford University Press, New York.

Corbin, J., & Strauss , A. (1990). Grounded Theory Research: Procedures, Canons, and Evaluative Criteria. Qualitative Sociology, 13(1), 3-21.

Cresswell, J.W, (2003). Research Designs: Qualitative, Quantitative and Mixed method approaches. (2 ed.). Thousand Oaks,CA: Sage.

Creswell, J.W, Plano Clark VL. (2011). Designing and conducting mixed methods research. (2 ed.). Thousand Oaks, CA: Sage.

Directorate of Health and Family welfare, Government of Karnataka. (2017). Annual report 2015-16. Bangalore: Directorate of Health and Family welfare.
Erikson, E.H. (1993, Originally Published in1950). Childhood and Society. New York: Norton

Gouda, J., Das, K. C., Goli, S., & Pou, L. M. (2013). International Journal of Sociology and Social Policy, 33(11/12), 708-724.

Government of India. (1961). Report of School Health Committee, Part 1. New Delhi: entral Health Education Bureau.

Huang,, K. Y., Cheng, S., & Theise, R. (2013). School Contexts as Social Determinants of Child Health: Current Practices and Implications for Future Public Health Practice.128(3), 21-28.

Illinois Association of School Social Workers. (2018). About School Social Work. Who We Are and What We Do. Retrieved July 6, 2018, from www.iassw.org: https://iassw.org/ about/about- school-social-work/

Krueger, R.A, & Casey, M.A. (2000). Focus Groups. A Practical Guide for Applied Research. (3 ed.). Thousand Oaks, CA: Sage Publications.

Mahal, A. (2005). Policy Implications of the Distribution of Public Subsidies on Health and Education: TheCase of Karnataka, India. Comparative Education Review, Special Issue on Education and PublicHealth: Mutual Challenges Worldwide, 49(4), 552-574.

Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. Nursing Research, 40, 120–123.

Muralidharan, K., & Kremer, M. (2006, March 22). Public and Private Schools in Rural India. Retrieved February 1, 2017, from http://varun_ag.scripts.mit.edu: http://varun_ag.scripts.mit.edu/~varun_ag/readinggroup/images/d/dc/Public_and_Private_Schools_in_Rural_India.pdf

Onwuegbuzie, A. J., & Collins, K. M. (2007). A Typology of Mixed Methods Sampling Designs in Social Science Research. The Qualitative Report, 12(2), 281-316.

Osher D., Kendziora K., Spier E., Garibaldi M.L. (2014) School Influences on Child and Youth Development. In: Sloboda Z., Petras H. (eds) Defining Prevention Science. Advances in Prevention Science. Springer, Boston, MA

Paltzer, J., Barker, E., & Witt, W. P. (2013). Measuring the health-related quality of life (HRQoL) of young children in resource-limited settings: a review of existing measures. Qual Life Res, 22, 1177–1187.

Pan Canadian Joint Consortium for School Health. (2010). Facilitating Health and Education sector collaboration in support of comprehensive school health. Canadian Journal of Public Health, S18-S19.

Sen Gupta, P., R., De Wit, M. L., & Mc Keown, D. (2007). The impact of poverty on the current and future health status of children. Paediatr Child Health, 12(8), 667-672.

Ravens-Sieberer, U., & Bullinger, M. (2000, August 28). Manual - kindl.org. Retrieved from www. kindl.org: https://www.kindl.org/app/download/ 6175836884/ Man English.pdf?t=1338645880

Ravens-Sieberer.U., R., Erhart, M., Wille, N., Bullinger, M., & group, a. t. (2008). Health-related quality of life in children and adolescents. Eur Child Adolesc Psychiatry, 148-156.

Richardson, T., Morrissette, M., & Zucker, L. (2012). School based Adolescent Mental Health Programs. Social Work Today., 24.

Sylva, K. (1994). School influences on Children's Development. Journal of child psychology and psychiatrry.,35 (1), 135-170.

Tashakkori, A., & Tedlie, C. (1998). Mixed methodolgy: Combining Qualitative and Quantitative Research Approaches. Applied Social Research Methods Series, (Vols 46). Thousand Oaks: SAGE Publications.

Wee, H., Lee,, W., Ravens-Sieberer,, U., Erhart, M., & Li, S. (2005, May,). Validation of the English Version of the KINDL® Generic Children's Health-Related Qualityof Qualityof Life Instrument for an Asian Population: Results from a Pilot Test. Quality of Life Research,, 14(4), 1193-1200.

World Health Organization. (2007). Helping parents to in developing countries to improve adolescents' health. Retrieved from http:/hrweb.mit.edu/worklife/raising- teens/pdfs/ helping-parents.pdf

World Health Organization. (1999). Improving Health through Schools: National and International strategies. Atlanta, Goergia, USA: WHO.